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ApplicationAddress to:
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Application Number 09/135,504

Filing Date

First Named Inventor PHILLIP IGBINADOLOR

Art Unit 2614

Examiner Name NATHAN SLOAN

Attorney Docket Number

Please change the Correspondence Address for the above-identified patent application to:

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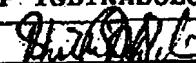
<input checked="" type="checkbox"/> Firm or Individual Name	PHILLIP IGBINADOLOR			
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I am the:

Applicant/Inventor
 Assignee or record of the entire interest.
 Statement under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/126).
 Attorney or Agent of record. Registration Number _____
 Registered practitioner named in the application transmittal letter in an application or in an executed oath or declaration. See 37 CFR 1.33(a)(1). Registration Number _____

Typed or Printed Name PHILLIP IGBINADOLOR

Signature 

Date JUN 14 2004 Telephone (718) 558-5764

NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representatives (if any) are required. Submit multiple forms if more than one signature is required, see below.

 "Total of" _____ forms are submitted.

This collection of information is required by 37 CFR 1.33. The information is required to obtain or retain a benefit by a party (or parties) in an application. Confidentiality is governed by 33 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 3 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the complexity of the application. Any comments on the burden estimate or any requests for extension of the time for completion should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEE OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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rights and should not be routinely used for filing applications. There are at least two reasons why this should not be used on a routine basis. First, there are obvious dangers to applicant and the public if he or she fails to obtain a correct literal translation. Second, the filing of a large number of applications under the procedure will create significant administrative burdens on the Office.

ILLUSTRATIONS IN THE SPECIFICATION

Graphical illustrations, diagrammatic views, flowcharts, and diagrams in the descriptive portion of the specification do not come within the purview of 37 CFR 1.58(a), which permits tables and chemical formulas in the specification in lieu of formal drawings. The examiner should object to such descriptive illustrations in the specification and request formal drawings in accordance with 37 CFR 1.81 when an application contains graphs in the specification.

Since the December 7, 1976, issue of patents, all tables and mathematical equations and chemical formulas, or portions thereof, have been reproduced for printing by a computer process developed by the Data Base Contractor. Those portions of chemical formulas which cannot be reproduced by the process, such as dotted, curved, broken and wedge-shaped lines, must be drawn by hand on the photocomposed page. There are, however, some chemical structures which cannot be reproduced because they are either too complex or involve too many lines which cannot be generated by the computer process. The camera copy process, which is used to insert these types of structures onto the printed patent page, is both time consuming and costly to the Office. Because of the reduction factor and failure to comply with the guidelines set forth in 37 CFR 1.52(a) and 37 CFR 1.58(a) the reproduction of these structures is often poor.

Therefore, the specification, including any claims, may contain chemical formulas and mathematical equations, but should not contain drawings or flow diagrams or diagrammatic views of chemical structures. The description portion of the specification may contain tables; claims may contain tables only if necessary to conform to 35 U.S.C. 112.

See MPEP § 601.01(d) for treatment of applications filed without all pages of the specification.

608.01(a) Arrangement of Application

37 CFR 1.77. *Arrangement of application elements.*

(a) The elements of the application, if applicable, should appear in the following order:

(1) Utility Application Transmittal Form.

(2) Fee Transmittal Form.

(3) Title of the invention; or an introductory portion stating the name, citizenship, and residence of the applicant, and the title of the invention.

(4) Cross-reference to related applications.

(5) Statement regarding federally sponsored research or development.

(6) Reference to a "Microfiche appendix." (See § 1.96 (c)).

The total number of microfiche and total number of frames should be specified.

(7) Background of the invention.

(8) Brief summary of the invention.

(9) Brief description of the several views of the drawing.

(10) Detailed description of the invention.

(11) Claim or claims.

(12) Abstract of the Disclosure.

(13) Drawings.

(14) Executed oath or declaration.

(15) Sequence Listing (See §§ 1.821 through 1.825).

(b) The elements set forth in paragraphs (a)(3) through (a)(5), (a)(7) through (a)(12) and (a)(15) of this section should appear in upper case, without underlining or bold type, as section headings. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading.

For design patent specification, see MPEP § 1503.01.

For plant patent specification, see MPEP § 1605.

For reissue patent specification, see MPEP § 1411.

The following order of arrangement of specification elements is preferable in framing the nonprovisional specification and, except for the reference to a "Microfiche Appendix", each of the lettered items should appear in upper case, without underlining or bold type, as section headings. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading. It is recommended that provisional applications follow the same general format, although claims are not required.

(A) Title of the Invention.

(B) Cross-References to Related Applications.

(C) Statement Regarding Federally Sponsored Research or Development.

(D) Reference to a "Microfiche Appendix." (See 37 CFR 1.96.)

(E) Background of the Invention.

(1) Field of the Invention.

(2) Description of the related art including information disclosed under 37 CFR 1.97 and 1.98.

- (F) Brief Summary of the Invention.
- (G) Brief Description of the Several Views of the Drawings.
- (H) Detailed Description of the Invention.
- (I) Claim or Claims.
- (J) Abstract of the Disclosure.
- (K) Drawings.
- (L) Sequence Listing (See 37 CFR 1.821–1.825).

Applicant (typically a *pro se*) may be advised of the proper arrangement by using Form Paragraph 6.01 or 6.02.

¶ 6.01 Arrangement of Specification

The following guidelines illustrate the preferred layout and content for patent applications. These guidelines are suggested for the applicant's use.

Arrangement of the Specification

The following order or arrangement is preferred in framing the specification and, except for the reference to a "Microfiche Appendix" and the drawings, each of the lettered items should appear in upper case, without underling or bold type, as section headings. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

- (a) Title of the Invention.
- (b) Cross-Reference to Related Applications.
- (c) Statement Regarding Federally Sponsored Research or Development.
- (d) Reference to a "Microfiche Appendix" (see 37 CFR 1.96).
- (e) Background of the Invention.
- 1. Field of the Invention.
- 2. Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.
- (f) Brief Summary of the Invention.
- (g) Brief Description of the Several Views of the Drawing(s).
- (h) Detailed Description of the Invention.
- (i) Claim or Claims (commencing on a separate sheet).
- (j) Abstract of the Disclosure (commencing on a separate sheet).
- (k) Drawings.
- (l) Sequence Listing (see 37 CFR 1.821–1.825):

Examiner Note:

In this paragraph an introductory sentence will be necessary. This paragraph is intended primarily for use in *pro se* applications.

¶ 6.02 Content of Specification

Content of Specification

- (a) Title of the Invention: See 37 CFR 1.72(a). The title of the invention should be placed at the top of the first page of the specification. It should be brief but technically accurate and descriptive, preferably from two to seven words.
- (b) Cross-References to Related Applications: See 37 CFR 1.78 and MPEP § 201.11.
- (c) Statement Regarding Federally Sponsored Research or Development: See MPEP § 310.
- (d) Reference to a "Microfiche Appendix": See 37 CFR 1.96(c) and MPEP § 608.05. The total number of microfiche and the total number of frames should be specified.
- (e) Background of the Invention: The specification should set forth the Background of the Invention in two parts:
 - (1) Field of the Invention: A statement of the field of art to which the invention pertains. This statement may include a paraphrasing of the ap-

plicable U.S. patent classification definitions of the subject matter of the claimed invention. This item may also be titled "Technical Field."

(2) Description of the Related Art: A description of the related art known to the applicant and including, if applicable, references to specific related art and problems involved in the prior art which are solved by the applicant's invention. This item may also be titled "Background Art."

(f) Brief Summary of the Invention: A brief summary or general statement of the invention as set forth in 37 CFR 1.73. The summary is separate and distinct from the abstract and is directed toward the invention rather than the disclosure as a whole. The summary may point out the advantages of the invention or how it solves problems previously existent in the prior art (and preferably indicated in the Background of the Invention). In chemical cases it should point out in general terms the utility of the invention. If possible, the nature and gist of the invention or the inventive concept should be set forth. Objects of the invention should be treated briefly and only to the extent that they contribute to an understanding of the invention.

(g) Brief Description of the Several Views of the Drawing(s): A reference to and brief description of the drawing(s) as set forth in 37 CFR 1.74.

(h) Detailed Description of the Invention: A description of the preferred embodiment(s) of the invention as required in 37 CFR 1.71. The description should be as short and specific as is necessary to describe the invention adequately and accurately. Where elements or groups of elements, compounds, and processes, which are conventional and generally widely known in the field of the invention described, and their exact nature or type is not necessary for an understanding and use of the invention by a person skilled in the art, they should not be described in detail. However, where particularly complicated subject matter is involved or where the elements, compounds, or processes may not be commonly or widely known in the field, the specification should refer to another patent or readily available publication which adequately describes the subject matter.

(i) Claim or Claims: See 37 CFR 1.75 and MPEP § 608.01(m). The claim or claims must commence on a separate sheet (37 CFR 1.52(b)). Where a claim sets forth a plurality of elements or steps, each element or step of the claim should be separated by a line indentation. There may be plural indentations to further segregate subcombinations or related steps. See 37 CFR 1.75.

(j) Abstract of the Disclosure: A brief narrative of the disclosure as a whole in a single paragraph of 250 words or less commencing on a separate sheet following the claims.

(k) Drawings: See 37 CFR 1.81, 1.83–1.85, and MPEP § 608.02.

(l) Sequence Listing: See 37 CFR 1.821–1.825.

Examiner Note:

In this paragraph an introductory sentence will be necessary. This paragraph is intended primarily for use in *pro se* applications. See also "pro se" form paragraphs in Chapter 1700 of the Manual of Patent Examining Form Paragraphs.

608.01(b) Abstract of the Disclosure

37 CFR 1.72 Title and abstract.

(b) A brief abstract of the technical disclosure in the specification must commence on a separate sheet, preferably following the claims under the heading "Abstract of the Disclosure." The purpose of the abstract is to enable the Patent and Trademark Office and the public generally to determine quickly from a cursory inspection the nature and gist of the technical disclosure. The abstract shall not be used for interpreting the scope of the claims.

In all applications which lack an abstract, the examiner in the first Office action should require the submission of an abstract directed to the technical disclosure in the

specification. See Form Paragraph 6.12 (below). Applicants may use either "Abstract" or "Abstract of the Disclosure" as a heading.

If the abstract contained in the application does not comply with the guidelines, the examiner should point out the defect to the applicant in the first Office action, or at the earliest point in the prosecution that the defect is noted, and require compliance with the guidelines. Since the abstract of the disclosure has been interpreted to be a part of the specification for the purpose of compliance with paragraph 1 of 35 U.S.C. 112 (*In re Armbruster*, 512 F.2d 676, 678-79, 185 USPQ 152, 154 (CCPA 1975)), it would ordinarily be preferable that the applicant make the necessary changes to the abstract to bring it into compliance with the guidelines. See Form Paragraphs 6.13-6.16 (below).

Replies to such actions requiring either a new abstract or amendment to bring the abstract into compliance with the guidelines should be treated under 37 CFR 1.111(b) practice like any other formal matter. Any submission of a new abstract or amendment to an existing abstract should be carefully reviewed for introduction of new matter, 35 U.S.C. 132, MPEP § 608.04.

Upon passing the application to issue, the examiner should make certain that the abstract is an adequate and clear statement of the contents of the disclosure and generally in line with the guidelines. The abstract shall be changed by the examiner's amendment in those instances where deemed necessary. This authority and responsibility of the examiner shall not be abridged by the desirability of having the applicant make the necessary corrections. For example, if the application is otherwise in condition for allowance except that the abstract does not comply with the guidelines, the examiner generally should make any necessary revisions by examiner's amendment rather than issuing an *Ex parte Quayle* action requiring applicant to make the necessary revisions.

Under current practice, in all instances where the application contains an abstract when sent to issue, the abstract will be printed on the patent.

GUIDELINES FOR THE PREPARATION OF PATENT ABSTRACTS

Background

The Rules of Practice in Patent Cases require that each application for patent include an abstract of the disclosure, 37 CFR 1.72(b).

The content of a patent abstract should be such as to enable the reader thereof, regardless of his or her degree of familiarity with patent documents, to ascertain quickly the character of the subject matter covered by the technical disclosure and should include that which is new in the art to which the invention pertains.

The abstract is not intended nor designated for use in interpreting the scope or meaning of the claims, 37 CFR 1.72(b).

Content

A patent abstract is a concise statement of the technical disclosure of the patent and should include that which is new in the art to which the invention pertains.

If the patent is of a basic nature, the entire technical disclosure may be new in the art, and the abstract should be directed to the entire disclosure.

If the patent is in the nature of an improvement in old apparatus, process, product, or composition, the abstract should include the technical disclosure of the improvement.

In certain patents, particularly those for compounds and compositions, wherein the process for making and/or the use thereof are not obvious, the abstract should set forth a process for making and/or a use thereof.

If the new technical disclosure involves modifications or alternatives, the abstract should mention by way of example the preferred modification or alternative.

The abstract should not refer to purported merits or speculative applications of the invention and should not compare the invention with the prior art.

Where applicable, the abstract should include the following: (1) if a machine or apparatus, its organization and operation; (2) if an article, its method of making; (3) if a chemical compound, its identity and use; (4) if a mixture, its ingredients; (5) if a process, the steps. Extensive mechanical and design details of apparatus should not be given.

With regard particularly to chemical patents, for compounds or compositions, the general nature of the compound or composition should be given as well as the use thereof, e.g., "The compounds are of the class of alkyl benzene sulfonyl ureas, useful as oral anti-diabetics." Exemplification of a species could be illustrative of members of the class. For processes, the type reaction, reagents and process conditions should be stated, generally illustrated by a single example unless variations are necessary.

Language and Format

The abstract must commence on a separate sheet, preferably following the claims, under the heading "Abstract of the Disclosure." Form Paragraph 6.16.01 (below) may be used if the abstract does not commence on a separate sheet.

The abstract should be in narrative form and generally limited to a single paragraph within the range of 50 to 250 words. The abstract should not exceed 25 lines of text. Abstracts exceeding 25 lines of text should be checked to see that it does not exceed 250 words in length since the space provided for the abstract on the computer tape by the printer is limited. If the abstract cannot be placed on the computer tape because of its excessive length, the application will be returned to the examiner for preparation of a shorter abstract. The form and legal phraseology often used in patent claims, such as "means" and "said", should be avoided. The abstract should sufficiently describe the disclosure to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "This disclosure concerns," "The disclosure defined by this invention," "This disclosure describes," etc.

Responsibility

Preparation of the abstract is the responsibility of the applicant. Background knowledge of the art and an appreciation of the applicant's contribution to the art are most important in the preparation of the abstract. The review of the abstract for compliance with these guidelines, with any necessary editing and revision on allowance of the application, is the responsibility of the examiner.

Sample Abstracts

(1) A heart valve which has an annular valve body defining an orifice and a plurality of struts forming a pair of cages on opposite sides of the orifice. A spherical closure member is captively held within the cages and is moved by blood flow between open and closed positions in check valve fashion. A slight leak or backflow is provided in the closed position by making the orifice slightly larger than the closure member. Blood flow is maximized in the open position of the valve by providing an inwardly convex contour on the orifice-defining surfaces of the body. An annular rib is formed in a channel around the periphery of the valve body to anchor a suture ring used to secure the valve within a heart.

(2) A method for sealing whereby heat is applied to seal, overlapping closure panels of a folding box made from paperboard having an extremely thin coating of moisture-proofing thermoplastic material on opposite surfaces. Heated air is directed at the surfaces to be bonded, the temperature of the air at the point of impact on the surfaces being above the char point of the board. The duration of application of heat is made so brief, by a corresponding high rate of advance of the boxes through the air stream, that the coating on the reverse side of the panels remains substantially non-tacky. The bond is formed immediately after heating within a period of time for any one surface point less than the total time of exposure to heated air of that point. Under such conditions the heat applied to soften the thermoplastic coating is dissipated after completion of the bond by absorption into the board acting as a heat sink without the need for cooling devices.

(3) Amides are produced by reacting an ester of a carboxylic acid with an amine, using as catalyst an alkoxide of an alkali metal. The ester is first heated to at least 75°C under a pressure of no more than 500 mm. of mercury to remove moisture and acid gases which would prevent the reaction, and then converted to an amide without heating to initiate the reaction.

¶ 6.12 Abstract Missing (Background)

This application does not contain an abstract of the disclosure as required by 37 CFR 1.72(b). An abstract on a separate sheet is required.

Examiner Note:

For pro se applicant, consider form paragraphs 6.14 to 6.16.

¶ 6.13 Abstract Objected To: Minor Informalities

The abstract of the disclosure is objected to because [1]. Correction is required. See MPEP § 608.01(b).

Examiner Note:

In bracket 1, indicate the informalities that should be corrected. Use this paragraph for minor informalities such as the inclusion of legal phraseology, undue length, etc.

¶ 6.14 Abstract of the Disclosure: Content

Applicant is reminded of the proper content of an abstract of the disclosure.

A patent abstract is a concise statement of the technical disclosure of the patent and should include that which is new in the art to which the invention pertains. If the patent is of a basic nature, the entire technical disclosure may be new in the art, and the abstract should be directed to the entire disclosure. If the patent is in the nature of an improvement in an old apparatus, process, product, or composition, the abstract should include the technical disclosure of the improvement. In certain patents, particularly those for compounds and compositions, wherein the process for making and/or the use thereof are not obvious, the abstract should set forth a process for making and/or use thereof. If the new technical disclosure involves modifications or alternatives, the abstract should mention by way of example the preferred modification or alternative.

The abstract should not refer to purported merits or speculative applications of the invention and should not compare the invention with the prior art.

Where applicable, the abstract should include the following:

- (1) if a machine or apparatus, its organization and operation;
- (2) if an article, its method of making;
- (3) if a chemical compound, its identity and use;
- (4) if a mixture, its ingredients;
- (5) if a process, the steps.

Extensive mechanical and design details of an apparatus should not be included in the abstract.

Examiner Note:

See form paragraph 6.16.

¶ 6.15 Abstract of the Disclosure: Chemical Cases

Applicant is reminded of the proper content of an abstract of the disclosure.

In chemical patent abstracts for compounds or compositions, the general nature of the compound or composition should be given as well as its use, e.g., "The compounds are of the class of alkyl benzene sulfonyl ureas, useful as oral anti-diabetics." Exemplification of a species could be illustrative of members of the class. For processes, the type reaction, reagents and process conditions should be stated, generally illustrated by a single example unless variations are necessary.

Complete revision of the content of the abstract is required on a separate sheet.

¶ 6.16 Abstract of the Disclosure: Language

Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 250 words. It is important that the abstract not exceed 250 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

Examiner Note:

See also form paragraph 6.14.

¶ 6.16.01 Abstract of the Disclosure: Placement

The abstract of the disclosure does not commence on a separate sheet in accordance with 37 CFR 1.52(b)(1). A new abstract of the disclosure is required and must be presented on a separate sheet, apart from any other text.

Examiner Note:

This paragraph should only be used for applications filed on or after September 23, 1996.

608.01(c) Background of the Invention

The Background of the Invention ordinarily comprises two parts:

(1) **Field of the Invention:** A statement of the field of art to which the invention pertains. This statement may include a paraphrasing of the applicable U.S. patent classification definitions. The statement should be directed to the subject matter of the claimed invention.

(2) **Description of the related art including information disclosed under 37 CFR 1.97 and 37 CFR 1.98:** A paragraph(s) describing to the extent practical the state of the prior art or other information disclosed known to the applicant, including references to specific prior art or other information where appropriate. Where applica-

ble, the problems involved in the prior art or other information disclosed which are solved by the applicant's invention should be indicated. See also MPEP § 608.01(a), § 608.01(p) and § 707.05(b).

608.01(d) Brief Summary of Invention**37 CFR 1.73. Summary of the invention.**

A brief summary of the invention indicating its nature and substance, which may include a statement of the object of the invention, should precede the detailed description. Such summary should, when set forth, be commensurate with the invention as claimed and any object recited should be that of the invention as claimed.

Since the purpose of the brief summary of invention is to apprise the public, and more especially those interested in the particular art to which the invention relates, of the nature of the invention, the summary should be directed to the specific invention being claimed, in contradistinction to mere generalities which would be equally applicable to numerous preceding patents. That is, the subject matter of the invention should be described in one or more clear, concise sentences or paragraphs. Stereotyped general statements that would fit one case as well as another serve no useful purpose and may well be required to be canceled as surplusage, and, in the absence of any illuminating statement, replaced by statements that are directly on point as applicable exclusively to the case at hand.

The brief summary, if properly written to set out the exact nature, operation, and purpose of the invention, will be of material assistance in aiding ready understanding of the patent in future searches. The brief summary should be more than a mere statement of the objects of the invention, which statement is also permissible under 37 CFR 1.73.

The brief summary of invention should be consistent with the subject matter of the claims. Note final review of application and preparation for issue, MPEP § 1302.

608.01(e) Reservation Clauses Not Permitted**37 CFR 1.79. Reservation clauses not permitted.**

A reservation for a future application of subject matter disclosed but not claimed in a pending application will not be permitted in the pending application, but an application disclosing unclaimed subject matter may contain a reference to a later filed application of the same applicant or owned by a common assignee disclosing and claiming that subject matter.

608.01(f) Brief Description of Drawings**37 CFR 1.74. Reference to drawings.**

When there are drawings, there shall be a brief description of the several views of the drawings and the detailed description of the invention shall refer to the different views by specifying the numbers of the figures, and to the different parts by use of reference letters or numerals (preferably the latter).

The Office of Initial Patent Examination (OIPE) will review the specification, including the brief description, to determine whether all of the figures of drawings described in the specification are present. If the specification describes a figure which is not present in the drawings, the application will be treated as an application filed without all figures of drawings in accordance with MPEP § 601.01(g), unless the application lacks any drawings, in which case the application will be treated as an application filed without drawings in accordance with MPEP § 601.01(f).

The examiner should see to it that the figures are correctly described in the brief description of the drawing, that all section lines used are referred to, and that all needed section lines are used.

The specification must contain or be amended to contain proper reference to the existence of drawings executed in color as required by 37 CFR 1.84.

37 CFR 1.84. Standards for drawings.

(a) *Drawings.* There are two acceptable categories for presenting drawings in utility patent applications:

(1) *Black ink.* Black and white drawings are normally required. India ink, or its equivalent that secures solid black lines, must be used for drawings, or

(2) *Color.* On rare occasions, color drawings may be necessary as the only practical medium by which to disclose the subject matter sought to be patented in a utility patent application or the subject matter of a statutory invention registration. The Patent and Trademark Office will accept color drawings in utility patent applications and statutory invention registrations only after granting a petition filed under this paragraph explaining why the color drawings are necessary. Any such petition must include the following:

- (i) The fee set forth in § 1.17(i);
- (ii) Three (3) sets of color drawings; and

(iii) The specification must contain the following language as the first paragraph in that portion of the specification relating to the brief description of the drawing:

The file of this patent contains at least one drawing executed in color. Copies of this patent with color drawing(s) will be provided by the Patent and Trademark Office upon request and payment of the necessary fee.

If the language is not in the specification, a proposed amendment to insert the language must accompany the petition.

608.01(g) Detailed Description of Invention

A detailed description of the invention and drawings follows the general statement of invention and brief description of the drawings. This detailed description, required by 37 CFR 1.71, MPEP § 608.01, must be in such particularity as to enable any person skilled in the pertinent art or science to make and use the invention without involving extensive experimentation. An applicant is ordinarily permitted to use his or her own terminology, as long as it can be understood. Necessary grammatical corrections, however, should be required by the examiner, but it must be remembered that an examination is not made for the purpose of securing grammatical perfection.

The reference characters must be properly applied, no single reference character being used for two different parts or for a given part and a modification of such part. In the latter case, the reference character, applied to the given part, with a prime affixed may advantageously be applied to the modification. Every feature specified in the claims must be illustrated, but there should be no superfluous illustrations.

The description is a dictionary for the claims and should provide clear support or antecedent basis for all terms used in the claims. See 37 CFR 1.75, MPEP § 608.01(i), § 608.01(o), and § 1302.01.

For completeness, see MPEP § 608.01(p).

USE OF SYMBOL "Phi" IN PATENT APPLICATION

The Greek letter "Phi" has long been used as a symbol in equations in all technical disciplines. It further has special uses which include the indication of an electrical phase or clocking signal as well as an angular measurement. The recognized symbols for the upper and lower case Greek Phi characters, however, do not appear on most typewriters. This apparently has led to the use of a symbol composed by first striking a zero key and then backspacing and striking the "cancel" or "slash" key to result in an approximation of accepted symbols for the Greek character Phi. In other instances, the symbol is composed using the upper or lower case letter "O" with the "cancel" or "slash" superimposed thereon by backspacing, or it is simply handwritten in a variety of styles. These expedients result in confusion because of the variety of type sizes and styles available on modern typewriters.

In recent years, the growth of data processing has seen the increasing use of this symbol ("O") as the standard representation of zero. The "slashed" or "canceled" zero is used to indicate zero and avoid confusion with the upper case letter "O" in both text and drawings.

Thus, when the symbol "Ø" in one of its many variations, as discussed above, appears in patent applications being prepared for printing, confusion as to the intended meaning of the symbol arises. Those (such as examiners, attorneys, and applicants) working in the art can usually determine the intended meaning of this symbol because of their knowledge of the subject matter involved, but editors preparing these applications for printing have no such specialized knowledge and confusion arises as to which symbol to print. The result, at the very least, is delay until the intended meaning of the symbol can be ascertained.

Since the Office does not have the resources to conduct a technical editorial review of each application before printing, and in order to eliminate the problem of printing delays associated with the usage of these symbols, any question about the intended symbol will be resolved by the editorial staff of the Office of Patent Publication by printing the symbol Ø whenever that symbol is used by the applicant. Any Certificate of Correction necessitated by the above practice will be at the patentee's expense (37 CFR 1.323) because the intended symbol was not accurately presented by the Greek upper or lower case Phi letters (ø,ø) in the patent application.

608.01(h) Mode of Operation of Invention

The best mode contemplated by the inventor of carrying out his or her invention must be set forth in the description. See 35 U.S.C. 112. There is no statutory requirement for the disclosure of a specific example. A patent specification is not intended nor required to be a production specification. *Spectra-Physics, Inc. v. Coherent, Inc.*, 827 F.2d 1524, 1536, 3 USPQ2d 1737, 1745 (Fed. Cir. 1987); *In re Gay*, 309 F.2d 768, 135 USPQ 311 (CCPA 1962). The absence of a specific working example is not necessarily evidence that the best mode has not been disclosed, nor is the presence of one evidence that it has. *In re Honn*, 364 F.2d 454, 150 USPQ 652 (CCPA 1966). In determining the adequacy of a best mode disclosure, only evidence of concealment (accidental or intentional) is to be considered. That evidence must tend to show that the quality

of an applicant's best mode disclosure is so poor as to effectively result in concealment. *Spectra-Physics, Inc. v. Coherent, Inc.*, 827 F.2d 1524, 1536, 3 USPQ2d 1737, 1745 (Fed. Cir. 1987); *In re Sherwood*, 613 F.2d 809, 204 USPQ 537 (CCPA 1980).

The question of whether an inventor has or has not disclosed what he or she feels is his or her best mode is a question separate and distinct from the question of sufficiency of the disclosure. *Spectra-Physics, Inc. v. Coherent, Inc.*, 827 F.2d 1524, 1532, 3 USPQ2d 1737, 1742 (Fed. Cir. 1987); *In re Glass*, 492 F.2d 1228, 181 USPQ 31 (CCPA 1974); *In re Gay*, 309 F.2d 708, 135 USPQ 311 (CCPA 1962). See 35 U.S.C. 112 and 37 CFR 1.71(b).

If the best mode contemplated by the inventor at the time of filing the application is not disclosed, such defect cannot be cured by submitting an amendment seeking to put into the specification something required to be there when the application was originally filed. *In re Hay*, 534 F.2d 917, 189 USPQ 790 (CCPA 1976). Any proposed amendment of this type should be treated as new matter.

Patents have been held invalid in cases where the patentee did not disclose the best mode known to him. See *Chemcast Corp. v. Arco Indus. Corp.*, 913 F.2d 923, 16 USPQ2d 1033 (Fed. Cir. 1990); *Dana Corp. v. IPC Ltd. Partnership*, 860 F.2d 415, 8 USPQ2d 1692 (Fed. Cir. 1988); *Spectra-Physics, Inc. v. Coherent, Inc.*, 821 F.2d 1524, 3 USPQ2d 1737 (Fed. Cir. 1987).

For completeness, see MPEP § 608.01(p) and § 2165 to § 2165.04.

608.01(i) Claims

37 CFR 1.75. Claims

(a) The specification must conclude with a claim particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention or discovery.

(b) More than one claim may be presented provided they differ substantially from each other and are not unduly multiplied.

(c) One or more claims may be presented in dependent form, referring back to and further limiting another claim or claims in the same application. Any dependent claim which refers to more than one other claim ("multiple dependent claim") shall refer to such other claims in the alternative only. A multiple dependent claim shall not serve as a basis for any other multiple dependent claim. For fee calculation purposes under § 1.16, a multiple dependent claim will be considered to be that number of claims to which direct reference is made therein. For fee calculation purposes, also, any claim depending from a multiple dependent claim will be considered to be that number of claims to which direct reference is made in that multiple dependent claim. In addition to the other filing fees, any original application which is filed with, or is amended to include, multiple dependent claims must have paid therein the fee set forth in § 1.16(d). Claims in dependent form shall be

construed to include all the limitations of the claim incorporated by reference into the dependent claim. A multiple dependent claim shall be construed to incorporate by reference all the limitations of each of the particular claims in relation to which it is being considered.

(d)(1) The claim or claims must conform to the invention as set forth in the remainder of the specification and the terms and phrases used in the claims must find clear support or antecedent basis in the description so that the meaning of the terms in the claims may be ascertainable by reference to the description (See § 1.58(a).)

(2) See §§ 1.141 to 1.146 as to claiming different inventions in one application.

(e) Where the nature of the case admits, as in the case of an improvement, any independent claim should contain in the following order, (1) a preamble comprising a general description of all the elements or steps of the claimed combination which are conventional or known, (2) a phrase such as "wherein the improvement comprises," and (3) those elements, steps and/or relationships which constitute that portion of the claimed combination which the applicant considers as the new or improved portion.

(f) If there are several claims, they shall be numbered consecutively in Arabic numerals.

(g) The least restrictive claim should be presented as claim number 1, and all dependent claims should be grouped together with the claim or claims to which they refer to the extent practicable.

(h) The claim or claims must commence on a separate sheet.

(i) Where a claim sets forth a plurality of elements or steps, each element or step of the claim should be separated by a line indentation.

For numbering of claims, see MPEP § 608.01(j).

For form of claims, see MPEP § 608.01(m).

For dependent claims, see MPEP § 608.01(n).

For examination of claims, see MPEP § 706.

For claims in excess of fee, see MPEP § 714.10.

608.01(j) Numbering of Claims

37 CFR 1.126. Numbering of claims.

The original numbering of the claims must be preserved throughout the prosecution. When claims are canceled the remaining claims must not be renumbered. When claims are added, they must be numbered by the applicant consecutively beginning with the number next following the highest numbered claim previously presented (whether entered or not). When the application is ready for allowance, the examiner, if necessary, will renumber the claims consecutively in the order in which they appear or in such order as may have been requested by applicant.

In a single claim case, the claim is not numbered.

Form Paragraph 6.17 may be used to notify applicant.

¶ 6.17 Numbering of Claims, 37 CFR 1.126

The numbering of claims is not in accordance with 37 CFR 1.126, which requires the original numbering of the claims to be preserved throughout the prosecution. When claims are canceled, the remaining claims must not be renumbered. When new claims are presented, they must be numbered consecutively beginning with the number next following the highest numbered claims previously presented (whether entered or not).

Misnumbered claim [1] been renumbered [2].

Examiner Note:

1. In bracket 1, insert appropriate claim number(s) and -- has -- or -- have --.
2. In bracket 2, insert correct claim number(s) and --, respectively -- if more than one claim is involved.

608.01(k) Statutory Requirement of Claims

35 U.S.C. 112 requires that the applicant shall particularly point out and distinctly claim the subject matter which he or she regards as his or her invention. The portion of the application in which he or she does this forms the claim or claims. This is an important part of the application, as it is the definition of that for which protection is granted.

608.01(l) Original Claims

In establishing a disclosure, applicant may rely not only on the description and drawing as filed but also on the original claims if their content justifies it.

Where subject matter not shown in the drawing or described in the description is claimed in the case as filed, and such original claim itself constitutes a clear disclosure of this subject matter, then the claim should be treated on its merits, and requirement made to amend the drawing and description to show this subject matter. The claim should not be attacked either by objection or rejection because this subject matter is lacking in the drawing and description. It is the drawing and description that are defective, not the claim.

It is, of course, to be understood that this disclosure in the claim must be sufficiently specific and detailed to support the necessary amendment of the drawing and description.

608.01(m) Form of Claims

The claim or claims must commence on a separate sheet and should appear after the detailed description of the invention. While there is no set statutory form for claims, the present Office practice is to insist that each claim must be the object of a sentence starting with "I (or we) claim", "The invention claimed is" (or the equivalent). If, at the time of allowance, the quoted terminology is not present, it is inserted by the clerk. Each claim begins with a capital letter and ends with a period. Periods may not be used elsewhere in the claims except for abbreviations. See *Fressola v. Manbeck*, 36 USPQ2d 1211 (D.D.C. 1995). Where a claim sets forth a plurality of elements or steps, each element or step of the claim should be separated by a line indentation, 37 CFR 1.75(i).

There may be plural indentations to further segregate subcombinations or related steps. In general, the printed patent copies will follow the format used but printing difficulties or expense may prevent the duplication of unduly complex claim formats.

Reference characters corresponding to elements recited in the detailed description and the drawings may be used in conjunction with the recitation of the same element or group of elements in the claims. The reference characters, however, should be enclosed within parentheses so as to avoid confusion with other numbers or characters which may appear in the claims. The use of reference characters is to be considered as having no effect on the scope of the claims.

Many of the difficulties encountered in the prosecution of patent applications after final rejection may be alleviated if each applicant includes, at the time of filing or no later than the first reply, claims varying from the broadest to which he or she believes he or she is entitled to the most detailed that he or she is willing to accept.

Claims should preferably be arranged in order of scope so that the first claim presented is the least restrictive. All dependent claims should be grouped together with the claim or claims to which they refer to the extent practicable. Where separate species are claimed, the claims of like species should be grouped together where possible. Similarly, product and process claims should be separately grouped. Such arrangements are for the purpose of facilitating classification and examination.

The form of claim required in 37 CFR 1.75(e) is particularly adapted for the description of improvement-type inventions. It is to be considered a combination claim. The preamble of this form of claim is considered to positively and clearly include all the elements or steps recited therein as a part of the claimed combination.

For rejections not based on prior art, see MPEP § 706.03.

The following form paragraphs may be used to object to the form of the claims.

¶ 6.18.01 *Claims: Placement*

The claims in this application do not commence on a separate sheet in accordance with 37 CFR 1.52(b)(1). Appropriate correction is required in response to this action.

Examiner Note:

This paragraph should only be used for applications filed on or after September 23, 1996.

¶ 7.29.01 *Claims Objected to, Minor Informalities*

Claim[1] objected to because of the following informalities: [2]. Appropriate correction is required.

Examiner Note:

1. Use this form paragraph to point out minor informalities such as spelling errors, inconsistent terminology, etc., which should be corrected.

2. If the informalities render the claim(s) indefinite, use form paragraph 7.34.01 instead to reject the claim(s) under 35 U.S.C. 112, second paragraph.

¶ 7.29.02 *Claims Objected to, Reference Characters Not Enclosed Within Parentheses*

The claims are objected to because they include reference characters which are not enclosed within parentheses.

Reference characters corresponding to elements recited in the detailed description of the drawings and used in conjunction with the recitation of the same element or group of elements in the claims should be enclosed within parentheses so as to avoid confusion with other numbers or characters which may appear in the claims. See MPEP § 608.01(m).

Examiner Note:

1. Use of this paragraph is optional. You may instead choose to correct the error yourself at time of allowance by informal examiner's amendment.

2. If the lack of parentheses renders the claim(s) indefinite, use form paragraph 7.34.01 instead to reject the claim(s) under 35 U.S.C. 112, second paragraph.

¶ 7.29.03 *Claims Objected to, Spacing of Lines*

The claims are objected to because the lines are crowded too closely together, making reading and entry of amendments difficult. Substitute claims with lines one and one-half or double spaced on good quality paper are required. See 37 CFR 1.52(b).

Amendments to the claims must be in compliance with 37 CFR 1.121(a)(2). Form paragraphs 6.33 and 6.34 may be used to inform applicant of nonentry of amendments to the claims.

¶ 6.33 *Amendment to the Claims, Addition of More Than 5 Words, 37 CFR 1.121*

The reply filed on [1] is not fully responsive to the prior Office action and the amendment to the claims has not been entered, because the amendment requests the addition of more than five words in at least one claim. See 37 CFR 1.121(a)(2)(i) below:

(i) Instructions for insertions and deletions: A claim may be amended by specifying only the exact matter to be deleted or inserted by an amendment and the precise point where the deletion or insertion is to be made, where the changes are limited to:

(A) Deletions and/or

(B) The addition of no more than five (5) words in any one claim; or

(A) The application must be accompanied by the fee required by law.

(B) The fee may be submitted after the specification and any required drawing are submitted, within such period and under such conditions, including the payment of a surcharge, as may be prescribed by the Commissioner.

(C) Upon failure to submit the fee within such prescribed period, the application shall be regarded as abandoned, unless it is shown to the satisfaction of the Commissioner that the delay in submitting the fee was unavoidable or unintentional.

(4) **FILING DATE.**—The filing date of a provisional application shall be the date on which the specification and any required drawing are received in the Patent and Trademark Office.

(5) **ABANDONMENT.**—The provisional application shall be regarded as abandoned 12 months after the filing date of such application and shall not be subject to revival thereafter.

(6) **OTHER BASIS FOR PROVISIONAL APPLICATION.**—Subject to all the conditions in this subsection and section 119(e) of this title, and as prescribed by the Commissioner, an application for patent filed under subsection (a) may be treated as a provisional application for patent.

(7) **NO RIGHT OF PRIORITY OR BENEFIT OF EARLIEST FILING DATE.**—A provisional application shall not be entitled to the right of priority of any other application under section 119 or 365(a) of this title or to the benefit of an earlier filing date in the United States under section 120, 121, or 365(c) of this title.

(8) **APPLICABLE PROVISIONS.**—The provisions of this title relating to applications for patent shall apply to provisional applications for patent, except as otherwise provided, and except that provisional applications for patent shall not be subject to sections 115, 131, 135, and 157 of this title.

(Amended Aug. 27, 1982, Public Law 97-247, sec. 5, 96 Stat. 319; Dec. 8, 1994, Public Law 103-465, sec. 532(b)(3), 108 Stat. 4986.)

35 U.S.C. 112 Specification.

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it

pertains, or with which it is most nearly connected, to make and use the same, and shall set forth the best mode contemplated by the inventor of carrying out his invention.

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

A claim may be written in independent or, if the nature of the case admits, in dependent or multiple dependent form.

Subject to the following paragraph, a claim in dependent form shall contain a reference to a claim previously set forth and then specify a further limitation of the subject matter claimed. A claim in dependent form shall be construed to incorporate by reference all the limitations of the claim to which it refers.

A claim in multiple dependent form shall contain a reference, in the alternative only, to more than one claim previously set forth and then specify a further limitation of the subject matter claimed. A multiple dependent claim shall not serve as a basis for any other multiple dependent claim. A multiple dependent claim shall be construed to incorporate by reference all the limitations of the particular claim in relation to which it is being considered.

An element in a claim for a combination may be expressed as a means or step for performing a specified function without the recital of structure, material, or acts in support thereof, and such claim shall be construed to cover the corresponding structure, material, or acts described in the specification and equivalents thereof.

(Amended July 24, 1965, Public Law 89-83, sec. 9, 79 Stat. 261; Nov. 14, 1975, Public Law 94-131, sec. 7, 89 Stat. 691.)

35 U.S.C. 113 Drawings.

The applicant shall furnish a drawing where necessary for the understanding of the subject matter sought to be patented. When the nature of such subject matter admits of illustration by a drawing and the applicant has not furnished such a drawing, the Commissioner may require its submission within a time period of not less than two months from the sending of a notice thereof. Drawings submitted after the filing date of the application may not be used (i) to overcome any insufficiency of the specification due to lack of an enabling disclosure or otherwise inadequate disclosure therein, or (ii) to supplement the

papers, prepared in compliance with the foregoing sentence, must be filed.

[47 FR 41275, Sept. 17, 1982, effective Oct. 1, 1982]

§ 1.67 Supplemental oath or declaration.

(a) A supplemental oath or declaration meeting the requirements of § 1.63 may be required to be filed to correct any deficiencies or inaccuracies present in an earlier filed oath or declaration.

(b) A supplemental oath or declaration meeting the requirements of § 1.63 must be filed when a claim is presented for matter originally shown or described but not substantially embraced in the statement of invention or claims originally presented or when an oath or declaration submitted in accordance with § 1.53(f) after the filing of the specification and any required drawings specifically and improperly refers to an amendment which includes new matter. No new matter may be introduced into a nonprovisional application after its filing date even if a supplemental oath or declaration is filed. In proper situations, the oath or declaration here required may be made on information and belief by an applicant other than the inventor.

(c) A supplemental oath or declaration meeting the requirements of § 1.63 must also be filed if the application was altered after the oath or declaration was signed or if the oath or declaration was signed:

- (1) In blank;
- (2) Without review thereof by the person making the oath or declaration; or
- (3) Without review of the specification, including the claims, as required by § 1.63(b)(1).

[48 FR 2711, Jan. 20, 1983, effective Feb. 27, 1983; para. (c) added, 57 FR 2021, Jan. 17, 1992, effective Mar. 16, 1992; para. (b) revised, 60 FR 20195, Apr. 25, 1995, effective June 8, 1995; para. (b) revised, 62 FR 53131, Oct. 10, 1997, effective Dec. 1, 1997]

§ 1.68 Declaration in lieu of oath.

Any document to be filed in the Patent and Trademark Office and which is required by any law, rule, or other regulation to be under oath may be subscribed to by a written declaration. Such declaration may be used in lieu of the oath otherwise required, if, and only if, the declarant is on the same document, warned that willful false statements and the like are punishable by fine or imprisonment, or both (18 U.S.C. 1001) and may jeopardize the validity of the application or any patent issuing thereon. The declarant must set forth in the body

of the declaration that all statements made of the declarant's own knowledge are true and that all statements made on information and belief are believed to be true.

[49 FR 48416, Dec. 12, 1984, effective Feb. 11, 1985]

§ 1.69 Foreign language oaths and declarations.

(a) Whenever an individual making an oath or declaration cannot understand English, the oath or declaration must be in a language that such individual can understand and shall state that such individual understands the content of any documents to which the oath or declaration relates.

(b) Unless the text of any oath or declaration in a language other than English is a form provided or approved by the Patent and Trademark Office, it must be accompanied by an English translation together with a statement that the translation is accurate, except that in the case of an oath or declaration filed under § 1.63, the translation may be filed in the Office no later than two months from the date applicant is notified to file the translation.

[42 FR 5594, Jan. 28, 1977; para. (b), 48 FR 2711, Jan. 20, 1983, effective Feb. 27, 1983; para. (b) revised, 62 FR 53131, Oct. 10, 1997, effective Dec. 1, 1997]

§ 1.70 [Reserved]

(Editor's note: Substance moved to § 1.497)

[52 FR 20046, May 28, 1987, effective July 1, 1987]

SPECIFICATION

§ 1.71 Detailed description and specification of the invention.

(a) The specification must include a written description of the invention or discovery and of the manner and process of making and using the same, and is required to be in such full, clear, concise, and exact terms as to enable any person skilled in the art or science to which the invention or discovery appertains, or with which it is most nearly connected, to make and use the same.

(b) The specification must set forth the precise invention for which a patent is solicited, in such manner as to distinguish it from other inventions and from what is old. It must describe completely a specific embodiment of the process, machine, manufacture, composition of matter or improvement invented, and must explain the mode of operation or principle whenever

applicable. The best mode contemplated by the inventor of carrying out his invention must be set forth.

(c) In the case of an improvement, the specification must particularly point out the part or parts of the process, machine, manufacture, or composition of matter to which the improvement relates, and the description should be confined to the specific improvement and to such parts as necessarily cooperate with it or as may be necessary to a complete understanding or description of it.

(d) A copyright or mask work notice may be placed in a design or utility patent application adjacent to copyright and mask work material contained therein. The notice may appear at any appropriate portion of the patent application disclosure. For notices in drawings, see § 1.84(s). The content of the notice must be limited to only those elements provided for by law. For example, “©1983 John Doe” (17 U.S.C. 401) and “*M* John Doe” (17 U.S.C. 909) would be properly limited and, under current statutes, legally sufficient notices of copyright and mask work, respectively. Inclusion of a copyright or mask work notice will be permitted only if the authorization language set forth in paragraph (e) of this section is included at the beginning (preferably as the first paragraph) of the specification.

(e) The authorization shall read as follows:

A portion of the disclosure of this patent document contains material which is subject to (copyright or mask work) protection. The (copyright or mask work) owner has no objection to the facsimile reproduction by anyone of the patent document or the patent disclosure, as it appears in the Patent and Trademark Office patent file or records, but otherwise reserves all (copyright or mask work) rights whatsoever.

[paras. (d) and (e), 53 FR 47808, Nov. 28, 1988, effective Jan. 1, 1989; para. (d), 58 FR 38719, July 20, 1993, effective Oct. 1, 1993]

§ 1.72 Title and abstract.

(a) The title of the invention, which should be as short and specific as possible, should appear as a heading on the first page of the specification, if it does not otherwise appear at the beginning of the application.

(b) A brief abstract of the technical disclosure in the specification must commence on a separate sheet, preferably following the claims, under the heading “Abstract of the Disclosure.” The purpose of the abstract is to enable the Patent and Trademark Office and the

public generally to determine quickly from a cursory inspection the nature and gist of the technical disclosure. The abstract shall not be used for interpreting the scope of the claims.

[31 FR 12922, Oct. 4, 1966; 43 FR 20464, May 11, 1978; para. (b) amended, 61 FR 42790, Aug. 19, 1996, effective Sept. 23, 1996]

§ 1.73 Summary of the invention.

A brief summary of the invention indicating its nature and substance, which may include a statement of the object of the invention, should precede the detailed description. Such summary should, when set forth, be commensurate with the invention as claimed and any object recited should be that of the invention as claimed.

§ 1.74 Reference to drawings.

When there are drawings, there shall be a brief description of the several views of the drawings and the detailed description of the invention shall refer to the different views by specifying the numbers of the figures and to the different parts by use of reference letters or numerals (preferably the latter).

§ 1.75 Claim(s).

(a) The specification must conclude with a claim particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention or discovery.

(b) More than one claim may be presented provided they differ substantially from each other and are not unduly multiplied.

(c) One or more claims may be presented in dependent form, referring back to and further limiting another claim or claims in the same application. Any dependent claim which refers to more than one other claim (“multiple dependent claim”) shall refer to such other claims in the alternative only. A multiple dependent claim shall not serve as a basis for any other multiple dependent claim. For fee calculation purposes under § 1.16, a multiple dependent claim will be considered to be that number of claims to which direct reference is made therein. For fee calculation purposes, also, any claim depending from a multiple dependent claim will be considered to be that number of claims to which direct reference is made in that multiple dependent claim. In addition to the other filing fees, any original application which is filed with, or is amended to include, multiple dependent claims must have paid therein the fee set forth in § 1.16(d). Claims in dependent form shall be

[24 FR 10332, Dec. 22, 1959; 46 FR 29183, May 29, 1981; para. (a) revised, 62 FR 53131, Oct. 10, 1997, effective Dec. 1, 1997]

§ 1.117 [Reserved]

[Removed and reserved, 62 FR 53131, Oct. 10, 1997, effective Dec. 1, 1997]

§ 1.118 [Reserved]

[48 FR 2712, Jan. 20, 1983, effective Feb. 27, 1983; removed and reserved, 62 FR 53131, Oct. 10, 1997, effective Dec. 1, 1997]

§ 1.119 [Reserved]

[32 FR 13583, Sept. 28, 1967; removed and reserved, 62 FR 53131, Oct. 10, 1997, effective Dec. 1, 1997]

§ 1.121 Manner of making amendments.

(a) *Amendments in nonprovisional applications, other than reissue applications:* Amendments in nonprovisional applications, excluding reissue applications, are made by filing a paper, in compliance with § 1.52, directing that specified amendments be made.

(1) *Specification other than the claims.* Except as provided in § 1.125, amendments to add matter to, or delete matter from, the specification, other than to the claims, may only be made as follows:

(i) *Instructions for insertions:* The precise point in the specification must be indicated where an insertion is to be made, and the matter to be inserted must be set forth.

(ii) *Instructions for deletions:* The precise point in the specification must be indicated where a deletion is to be made, and the matter to be deleted must be set forth or otherwise indicated.

(iii) *Matter deleted by amendment can be reinstated only by a subsequent amendment presenting the previously deleted matter as a new insertion.*

(2) *Claims.* Amendments to the claims may only be made as follows:

(i) *Instructions for insertions and deletions:* A claim may be amended by specifying only the exact matter to be deleted or inserted by an amendment and the precise point where the deletion or insertion is to be made, where the changes are limited to:

(A) Deletions and/or

(B) The addition of no more than five

(5) words in any one claim; or

(ii) *Claim cancellation or rewriting:* A claim may be amended by directions to cancel the claim or by rewriting such claim with underlining below the matter

added and brackets around the matter deleted. The rewriting of a claim in this form will be construed as directing the deletion of the previous version of that claim. If a previously rewritten claim is again rewritten, underlining and bracketing will be applied relative to the previous version of the claim, with the parenthetical expression "twice amended," "three times amended," etc., following the original claim number. The original claim number followed by that parenthetical expression must be used for the rewritten claim. No interlineations or deletions of any prior amendment may appear in the currently submitted version of the claim. A claim canceled by amendment (not deleted and rewritten) can be reinstated only by a subsequent amendment presenting the claim as a new claim with a new claim number.

(3) *Drawings.*

(i) *Amendments to the original application drawings are not permitted. Any change to the application drawings must be by way of a substitute sheet of drawings for each sheet changed submitted in compliance with § 1.84.*

(ii) *Where a change to the drawings is desired, a sketch in permanent ink showing proposed changes in red, to become part of the record, must be filed for approval by the examiner and should be in a separate paper.*

(4) *[Reserved]*

(5) *The disclosure must be amended, when required by the Office, to correct inaccuracies of description and definition, and to secure substantial correspondence between the claims, the remainder of the specification, and the drawings.*

(6) *No amendment may introduce new matter into the disclosure of an application.*

(b) *Amendments in reissue applications:* Amendments in reissue applications are made by filing a paper, in compliance with § 1.52, directing that specified amendments be made.

(1) *Specification other than the claims.* Amendments to the specification, other than to the claims, may only be made as follows:

(i) *Amendments must be made by submission of the entire text of a newly added or rewritten paragraph(s) with markings pursuant to paragraph (b)(1)(iii) of this section, except that an entire paragraph may be deleted by a statement deleting the paragraph without presentation of the text of the paragraph.*

(ii) The precise point in the specification must be indicated where the paragraph to be amended is located.

(iii) Underlining below the subject matter added to the patent and brackets around the subject matter deleted from the patent are to be used to mark the amendments being made.

(2) *Claims.* Amendments to the claims may only be made as follows:

(i)(A) The amendment must be made relative to the patent claims in accordance with paragraph (b)(6) of this section and must include the entire text of each claim which is being amended by the current amendment and of each claim being added by the current amendment with markings pursuant to paragraph (b)(2)(i)(C) of this section, except that a patent claim or added claim should be cancelled by a statement cancelling the patent claim or added claim without presentation of the text of the patent claim or added claim.

(B) Patent claims must not be renumbered and the numbering of any claims added to the patent must follow the number of the highest numbered patent claim.

(C) Underlining below the subject matter added to the patent and brackets around the subject matter deleted from the patent are to be used to mark the amendments being made. If a claim is amended pursuant to paragraph (b)(2)(i)(A) of this section, a parenthetical expression "amended," "twice amended," etc., should follow the original claim number.

(ii) Each amendment submission must set forth the status (*i.e.*, pending or cancelled) as of the date of the amendment, of all patent claims and of all added claims.

(iii) Each amendment when originally submitted must be accompanied by an explanation of the support in the disclosure of the patent for the amendment along with any additional comments on page(s) separate from the page(s) containing the amendment.

(3) *Drawings.*

(i) Amendments to the original patent drawings are not permitted. Any change to the patent drawings must be by way of a new sheet of drawings with the amended figures identified as "amended" and with added figures identified as "new" for each sheet changed submitted in compliance with § 1.84.

(ii) Where a change to the drawings is desired, a sketch in permanent ink showing proposed changes in red, to become part of the record, must be filed for approval by the examiner and should be in a separate paper.

(4) The disclosure must be amended, when required by the Office, to correct inaccuracies of description and definition, and to secure substantial correspondence between the claims, the remainder of the specification, and the drawings.

(5) No reissue patent shall be granted enlarging the scope of the claims of the original patent unless applied for within two years from the grant of the original patent, pursuant to 35 U.S.C. 251. No amendment to the patent may introduce new matter or be made in an expired patent.

(6) All amendments must be made relative to the patent specification, including the claims, and drawings, which is in effect as of the date of filing of the reissue application.

(c) *Amendments in reexamination proceedings:* Any proposed amendment to the description and claims in patents involved in reexamination proceedings must be made in accordance with § 1.530(d).

[32 FR 13583, Sept. 28, 1967; 46 FR 29183, May 29, 1981; para. (e), 49 FR 555, Jan. 4, 1984, effective Apr. 1, 1984; revised, 62 FR 53131, Oct. 10, 1997, effective Dec. 1, 1997]

§ 1.122 [Reserved]

[24 FR 10332, Dec. 22, 1959; para. (b), 49 FR 48416, Dec. 12, 1984, effective Feb. 11, 1985; removed and reserved, 62 FR 53131, Oct. 10, 1997, effective Dec. 1, 1997]

§ 1.123 [Reserved]

[48 FR 2712, Jan. 20, 1983, effective Feb. 27, 1983; 49 FR 555, Jan. 4, 1984, effective Apr. 1, 1984; amended, 58 FR 38719, July 20, 1993, effective Oct. 1, 1993; removed and reserved, 62 FR 53131, Oct. 10, 1997, effective Dec. 1, 1997]

§ 1.124 [Reserved]

[Removed and reserved, 62 FR 53131, Oct. 10, 1997, effective Dec. 1, 1997]

§ 1.125 Substitute specification.

(a) If the number or nature of the amendments or the legibility of the application papers renders it difficult to consider the application, or to arrange the papers for printing or copying, the Office may require the entire